PEOFFICE

Before the FEDERAL COMMUNICATIONS COMMISSION Washington, DC 20554

AUG 1 5 1996

FEDERAL COMMUNICATIONS COMMISSIO OFFICE OF SECRETARY

In the Matter of:)) DOCKET FILE COPY ORIGINAL Geographic Partitioning and Spectrum Disaggregation by Commercial Mobile Radio Services Licenses WT Docket No. 96-148 / Implementation of Section 257 of the GN Docket No. 96-113 Communications Act -Elimination of Market Entry Barriers

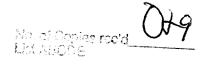
Comments of the United States Telephone Association

The United States Telephone Association (USTA) respectfully submits these initial comments in response to the Notice of Proposed Rulemaking in the above-referenced docket.¹ USTA is the principal trade association of the local exchange carrier (LEC) industry, and represents over 1100 members, including many PCS licensees and rural telephone companies.

INTRODUCTION AND SUMMARY

USTA supports the Commission's proposals to expand geographic partitioning and spectrum disaggregation to all eligible carriers. Many USTA members were successful bidders in the recent PCS auctions, and would deploy service to the public more rapidly under Commission rule changes which enhance the ability of those members to raise capital for the construction of PCS systems. In particular, where rural telephone companies have won licenses, the ability to partition areas to other qualifying entities will provide those companies with

¹Notice of Proposed Rulemaking, WT Docket No. 96-148, GN Docket No. 96-113, FCC 96-287 (July 15, 1996)("Notice").



additional capital which will facilitate the build-out of PCS systems in rural areas. Also, USTA believes that in many cases the ability of rural telephone companies to obtain partitioned licenses for areas not directly related to their local service area will enhance their ability to participate in broadband PCS. The ability to partition larger service areas will in many cases strengthen the business case for deploying PCS in rural areas. At the same time, the Commission should be careful that expanded use of partitioning does not undermine the Notice's goal of increasing the amount of capital available to smaller entities, and/or to deploy service in rural areas.

In some cases, rural telephone companies will not be able to participate in broadband PCS within their service area where competition results in significant increases in the cost of partitioned licenses (or disaggregated spectrum). See generally, Fifth Report and Order, PP Docket 93-253, 9 FCC Rcd 5532 (July 15, 1994)("Fifth Report and Order"). Evidence from recent spectrum auctions demonstrates that where more than one entity desires the spectrum in a particular area, rural telephone companies are likely to be financially excluded from obtaining spectrum to serve their traditional service areas.

Particularly where a competing PCS provider represents competition for traditional local services, and can obtain services and unbundled elements at prices which do not contribute to the historical costs of the network, see First Report and Order, CC Docket 96-98, FCC 96-325 (August 8, 1995), a rural telephone company may be unable to financially justify participation in broadband PCS where the price of spectrum is inflated. Moreover, in some circumstances, maintaining the network infrastructure in these rural areas will no longer be supported by government subsidies, but must be facilitated by the rural company's expansion into new services, including wireless services.

Such expansion into new services should not be inhibited by the Commission's spectrum policies, especially in light of the fact of the Congressional mandate of Section 309(j), which specifically mentions rural telephone companies (as distinct from small businesses generically). See 47 U.S.C. § 309(j). Accordingly, in order to fulfill the statutory mandate to promote

participation by such companies, USTA suggests that entities qualifying as "rural telephone companies," under Section 1(37) of the Communications Act be given a "right of first refusal" for a partitioned license covering their existing telephone service area. <u>See</u> 47 U.S.C. § 153(37).

Partitioned licenses which do not fall along county lines should be granted a waiver of that requirement where the parties can demonstrate that the proposed partitioned area deviates from county lines in order to include a related community of interest, to promote efficiencies through the use of existing network infrastructure, or where the partitionee seeks to combine the partitioned area with an adjacent license. USTA agrees that there should be limitations on transferability within the entrepreneur's blocks (C and F blocks), although entrepreneurs should not forfeit the benefits of their bidding preferences if they choose to raise capital by partitioning. Also, there should be no limit on the size of the partitioned license, provided that partitionees are required to satisfy the same construction requirements as the original licensee. Liberalized partitioning should not permit licensees to avoid their obligations to build-out their networks and thereby underserve rural areas.

DISCUSSION

I. The Commission's Proposals to Expand Eligibility for Partitioned Licenses Will Serve Its Goals to Increase Participation by Small Businesses

The <u>Notice</u> states that the Commission's goals in this proceeding are to enable a wide variety of broadband PCS applicants, including small businesses, rural telephone companies, and businesses owned by minorities and women, to overcome entry barriers through the creation of smaller, less capital-intensive licenses, and to provide a means for increased access to capital that can be used to construct and maintain PCS systems. <u>See Notice</u>, para. 11.

USTA agrees that these goals would be served by permitting licensees to partition licenses of any size geographic area to any qualifying entity. Many small businesses, including rural telephone companies, would be better served by partitioning licenses which may not relate to a telephone company service area or which are substantially larger than the 200% of the

service area presumed reasonable under the existing rules. See Competitive Bidding Fifth Report and Order, 9 FCC Rcd 5532, 5597-99; Notice, para. 5, n.12. Where a small and/or rural telephone company can offer a larger service area, or a service area with more concentrated demand, their PCS venture may have a greater chance of financial success.²

USTA members of all sizes were successful bidders in recent PCS auctions. These LECs may desire to partition off part of their MTA or BTA service area (or disaggregate a portion of their spectrum) in order to raise capital for PCS network deployment. This is particularly true where telephone companies are facing increased competition in core service areas, and may be required by their states to offer services and network elements at prices which do not reflect the full embedded cost of the network. See, e.g., First Report and Order, CC Docket 96-98, FCC 96-325 (August 8, 1996) ("Interconnection Order"). Consequently, permitting these licensees to partition or disaggregate will further the Commission's goal of rapid deployment of PCS services. See Notice, para. 20.

II. Pursuant to the Congressional Mandate, the Commission Should Adopt a Limited Right of First Refusal for Rural Telephone Companies

The <u>Notice</u> requests comment on whether the Commission's proposals will lessen rural telcos' ability to participate in the provision of broadband PCS. <u>Notice</u>, para. 17. As a general matter, the Commission's proposals will in fact increase rural telcos' ability to participate in broadband PCS, by enabling them to obtain partitioned licenses outside of, or substantially larger than, their existing service area. Accordingly, USTA supports the Commission's proposal.

The <u>Notice</u> also tentatively concludes that to the extent that other entities may also be interested in bringing service to underserved rural communities, these rules should facilitate

²Granting rural telephone companies the flexibility to tailor the size of the service area to the needs of the market is consistent with the Commission's prior finding that many rural telephone companies would not be able to justify the investment needed to construct a PCS system in a full-sized MTA. See Fifth Report and Order, para. 150.

competition in these areas. But, as the Telecommunications Act of 1996 recognizes, competition in rural areas does not always translate into lower prices and greater services to the public. See, e.g., 47 U.S.C. § 251(f). In some rural areas, competition for partitioned licenses could put broadband PCS outside the reach of rural telephone companies.

Where another entity provides PCS service in a rural area and obtains interconnection at rates similar to the Commission's recommended proxy rates adopted in the Interconnection Order, some rural telephone companies will not be advantaged by any efficiencies gained by their existing infrastructure.³ Yet these efficiencies were the original basis of the Commission's partitioning rules for rural telephone companies in the Fifth Report and Order.

Additionally, many rural telephone companies recognize that the revenues for traditional local service will no longer support the costs of deploying and maintaining the existing wireline network, as implicit subsidy mechanisms are removed from the rates for these services. In addition to the explicit subsidy mechanism currently being developed by a Federal-State Joint Board, see, e.g., 47 U.S.C. § 254, rural telephone companies expect to support the provision of basic service and needed network modernization through expansion into new services, including PCS. These recent rule changes require that competition be introduced cautiously in rural areas.

Consequently, USTA proposes that entities qualifying as rural telephone companies be given an option to either participate in PCS by obtaining a partitioned PCS license of any size through normal negotiations, or by exercising a "right of first refusal" to obtain the right to obtain a partitioned license covering their service area, at a "per-pop" price equal to that offered by the competing PCS provider. The parties applying to the Commission for a partitioned license would be required to notify the rural telephone companies within the partitioned license

³While the Act provides that "rural telephone companies" are exempt from such pricing rules until they receive a <u>bona fide</u> request, and a State Commission approves the request, 47 U.S.C. § 251(f)(1), it is likely that many such requests from PCS providers will be approved.

area.⁴ The partitioned license would only be granted upon a showing that the rural telephone company declined to exercise its right of first refusal, with respect to a final offer.

Of course, just as such rights are exercised in the normal course of business, the refusal of an initial offer does not excuse the seller from their obligation to present the rural telephone company with a new offer if a lower price is also offered to another prospective buyer. Rural telephone companies could exercise such right only once - that is, such rights would not accrue where the rural telephone company already obtained a partitioned license (whether 30 MHZ or 10 MHZ) or had previously exercised its right of first refusal.⁵

This proposal will serve the public interest by furthering the Congressional mandate to promote the dissemination of licenses to rural telephone companies, and by ensuring that the Commission's proposals to liberalize the partitioning and spectrum disaggregation rules do not create a barrier to entry for certain small rural telephone companies. As the Commission notes, the creation of smaller, less capital-intensive licenses within the reach of smaller entities will enable those entities to overcome other entry barriers. See Notice, para. 14. Permitting rural telephone companies to elect to obtain smaller, less-capital intensive licenses limited to their existing service area will further the participation of those rural companies in broadband PCS.

III. The Commission Should Not Limit the Size of a Partitioned License, But Should Adopt its Proposals to Impose Construction Obligations on License Partitionees

The <u>Notice</u> requests comment about several issues related to implementation of the new partitioning rules, including defining the boundaries of partitioned licenses. The <u>Notice</u>

⁴Subject to this additional provision, USTA supports the proposed licensing rules described in the <u>Notice</u>. The evidence of notice to the existing local telephone company could be included with the FCC Form 490. <u>See Notice</u>, para. 60.

⁵Of course, a rural telephone company who already purchased a partitioned license through normal negotiations would also not have a right of first refusal available.

tentatively concludes to require partitioned licenses to follow county line boundaries, and requests comment on what criteria would justify a waiver of that requirement. <u>Notice</u> at para. 18.

Partitioned licenses which do not fall along county lines should be granted a waiver of that requirement where the parties can demonstrate that the proposed partitioned area deviates from county lines in order to include a related community of interest, to promote efficiencies through the use of existing network infrastructure, or where the partitionee seeks to combine the partitioned area with an adjacent license. In many cases, the efficiencies of utilizing county lines (which correlate to the MTA and BTA boundaries utilized in the Commission's licensing database) may be outweighed by the benefits to the public interest obtained by arranging a service area which more closely relates to established patterns of service demand, available infrastructure, or available spectrum.

USTA agrees that there should be limitations on transferability within the entrepreneur's blocks (C and F blocks), and supports the Commission's proposals to avoid unjust enrichment by requiring licensees who have benefitted from special bidding procedures to partition licensees only to parties who qualify for such benefits. See Notice, para. 20. However, "entrepreneurs" who sell a partitioned license to similarly qualified applicants should not be required to repay a portion of the balance owed under an installment payment plan. See Notice, para. 21. The partitioning arrangement in no way lessens the Commission's expectations for payment from their status at the time the license was won at auction. At the same time, not requiring such payments would further the Commission's goal of providing licensees with a funding source which will enhance their ability to build-out their systems. Notice, para. 20.

Also, partitionees will have fully compensated the licensee for the value of their partitioned license, and the price charged by the licensee will take into account its installment payment obligations. It would therefore be unfair to the partitionee to require the partitionee to

guarantee payment of a portion of the partitioner's obligation. <u>Notice</u>, para. 22.⁶ Similarly, the original licensee should not have any continuing obligation with respect to the partitioned area under FCC regulations, although the parties could arrange for such obligations through private management contracts.

The <u>Notice</u> requests comment regarding limits on the size of the partitioned area. <u>Notice</u>, para. 19. There should be no limit on the size of the partitioned license, provided that partitionees are required to satisfy the same construction requirements as the original licensee. Liberalized partitioning should not permit licensees to avoid their obligations to build-out their networks and thereby underserve rural areas. The Commission should adopt its proposed options for modifying the construction requirements, with the terms dependent upon whether the five-year build-out requirement has been met. <u>See Notice</u>, para. 33-34.

CONCLUSION

USTA applauds the Commission for undertaking creative and progressive rule changes to increase participation by smaller entities in broadband PCS. The recent PCS auctions have for the most part, placed license ownership out of range of the financial means of all but the largest, most heavily-financed companies, contrary to the Congressional mandate to disseminate licenses to a wide variety of entities, including small businesses and rural telephone companies. Expanded use of the partitioning mechanism will enhance the ability of smaller concerns to provide broadband PCS service to the public.

At the same time, in order to ensure continued effectiveness of the original partitioning rules for rural telephone companies, the Commission should adopt USTA's proposal for a

⁶This is consistent with the existing practice of awarding the partitionee a separate license for the defined area. Thus, the partitionee is not affected by any default or failure to comply with the rules occasioned by the original licensee. The potential that a partitionee might be held liable for acts of the original licensee not within its control would stifle incentives to partition and undermine the Commission's objectives of lowering entry barriers into the PCS market.

limited "right of first refusal" for rural telephone company service areas. Fulfillment of new goals to remove entry barriers for smaller entities should not erect new barriers for rural telephone companies, or undermine the general goal of providing rural telephone companies and other small businesses with increased access to capital.

Respectfully submitted,

UNITED STATES TELEPHONE ASSOCIATION

BY

Mary McDermott

Linda Kent

Charles D. Cosson

Keith Townsend

U.S. Telephone Association 1401 H Street, NW, Suite 600 Washington, DC 20005 (202) 326-7249

August 15, 1996

Its Attorneys

CERTIFICATE OF SERVICE

I, Robyn L.J. Davis, do certify that on August 15, 1996 comments of the United States Telephone Association were either hand-delivered, or deposited in the U.S. Mail, first-class, postage prepaid to the persons on the attached service list.

Michelle Farquhar Federal Communications Commission 2025 M Street, NW Room 5002 Washington, DC 20554 David Nall Federal Communications Commission 2025 M Street, NW Room 7002 Washington, DC 20554 Mike Savir Federal Communications Commission 2025 M Street, NW Room 7130 Washington, DC 20554

Public Affairs Office News Media 1919 M Street, NW Room 202 Washington, DC 20554 International Transcription Service 2100 M Street, NW Suite 140 Washington, DC 20036 Suzan Andrews Bellcore 2101 L Street, NW Suite 600 Washington, DC 20037

Robert L. Riemer Senior Program Officer National Research Council 2101 Constitution Ave. Washington, DC 20418 Michael S. Slomin Senior Attorney Bell Communications Research, Inc. 290 W. Mt. Pleasant Ave. Livingston, NJ 07039 William J. Cole VP of Engineering Cobra Electronics Group Dynascan Corporation 6500 West Cortland Street Chicago, IL 60635

David A. Hendon
Deputy Director of Technical Affairs
Telecomm and Posts Division
Dept. of Trade & Industry
Kingsgate House
66-74 Victoria Street
London SW1E 6SW UK

R. Michael Senkowski Wiley, Rein & Fielding 1776 K Street, NW Washington, DC 20006 William J. Cowan General Counsel NY State Dept. of Public Service Three Empire State Plaza Albany, NY 12223

Stephan P. Carrier VP and Secretary Hughes Network Systems, Inc. 11717 Exploration Lane Germantown, MD 20874

Robert M Jackson Blooston, Mordkofdky, Jackson & Dickens 2120 L Street, NW Suite 300 Washington, DC 20037 James T. Carter Manager, Industry Affairs Rockwell International Corp. P.O. Box 568842 Dallas, TX 75356-8842

Pete Wanzenreid Asst. Chief State of CA Department of General Services Telecommunications Division 601 Sequoia Pacific Blvd. Sacramento, CA 95814-0282 Francine J. Berry AT&T 295 North Maple Ave. Room 3244J1 Basking Ridge, NJ 07920 Marci E. Greenstein Lukas, Mcgowan, Nace & Gutierrez 1819 H Street, NW 7th Floor Washington, DC 20006

Paul R. Rodriguez Leventhal, Senter, & Lerman 2000 K Street, NW Suite 600 Washington, DC 20006 Linda Muir Corporate Counsel Contel Corporation 245 Perimeter Center Pkwy., NE Atlanta, GA 30346 R. Frost Branon, Jr. BellSouth 1155 Peachtree Street, NW Atlanta, GA 30367 Mara J. Pastorkovich Senior Staff Attorney Utilities Telecommunications Council 1620 Eye Street, NW Suite 515 Washington, DC 20006 Scott J. Loftesness Sr. Vice President Fidelity Investments 82 Devonshire Street Boston, MA 02109 Margot Smiley Humphrey Koteen & Naftalin 1150 Connecticut Ave, NW Washington, DC 20554

Margaret deB. Brown Stanley J. Moore Pacific Telesis 1275 Pennsylvania Avenue, NW Washington, DC 20004 Michael C. Rau Sr. VP, Science & Tech. NAB 1771 N Street, NW Washington, DC 20036 John E. McNulty President & CEO Rose Communications, Inc. 2390 Wash Avenue Santa Clara, CA 95051

David A. LaFuria Lukas, McGowan, Nace & Gutierrez 1819 H Street, NW 7th Floor Washington, DC 20006 Thomas K Crowe Irwin, Campbell & Crowe 1320 18th Street, NW Suite 400 Washington, DC 20036 Bruce D. Jacobs Fisher, Wayland, Cooper & Leader 1255 23rd Street, NW Suite 800 Washington, DC 20037

Glenn S. Richards Gurman, Kurtis, Blask & Freedman 1400 16th Street, NW Suite 500 Washington, DC 20036 Christopher D. Imlay Booth, Freret & Imlay 1920 N Street, NW Suite 150 Washington, DC 20036 Dennis L. Hill Data Retrieval Manager Northwest Iowa Power Cooperative P.O. Box 240 Le Mars, IA 51031

Joseph Markoski Squire, Sanders & Dempsey 1201 Pennsylvania Ave., NW Washington, DC 20044

Robert Maher President Cellular Telecommunications Industry Association 1133 21st Street, NW Suite 300 Washington, DC 20036 David Cosson L. Marie Guillory NTCA 2626 Pennsylvania Avenue, NW Washington, DC 20037

Sam Antar VP, Law & Regulation Capital Cities/ABC, Inc. 77 West 66th Street NY, NY 10023 Patrick S. Berge 505 Van Ness Avenue San Francisco, CA 94102 Paul J. Sinderbrand Keck, Mahin & Cate 1201 New York Avenue, NW Washington, DC 20005

Werner K. Hartenberger Dow, Lohnes & Albertson 1255 23rd Street, NW Suite 500 Washington, DC 20037 Stuart Dolgin House Counsel Local Area Telecommunications, Inc. 17 Battery Place, Suite 1200 New York, NY 10004 Michael C. Trahos, DO. 4600 King Street, Suite 4E Alexandria, VA 22302 Lawrence Katz Bell Atlantic Companies 1310 North Court House Road Eighth Floor Arlington, VA 22201

PCN Associates 1344 Madonna Road Suite 207 San Luis Obispo, CA 93405

William H. Talmage Chief Counsel, Regulatory Section Law Department NCR Corporation 1700 S. Patterson Blvd. Dayton, OH 45479

John D. Lane Robert M. Gurss Wilkes, Artis, Hedrick & Lane 1666 K Street, NW #1100 Washington, DC 20006

James Lovette Apple Computer, Inc. 20525 Mariani Avenue, MS46A Cupertino, CA 95014

Russell H. Fox President American SMR Network Association, Inc. 1835 K Street, NW Suite 203 Washington, DC 20006

William L. Fishman
Sullivan & Worcester
1025 Connecticut Avenue, NW
Washington, DC 20036

David E. Weisman Alan S. Tilles Meyer, Faller, Weisman & Rosenberg, P.C. 4400 Jennifer Street, NW Suite 380 Washington, DC 20015

Leonard R. Raish Fletcher, Heald & Hildreth 1300 17th Street North 11th Floor Arlington, VA 22209

Veronica M Ahern Nixon, Hargrave, Devans & Doyle Suite 800 One Thomas Circle Washington, DC 20005

Henry Goldberg Goldberg & Spector 1229 19th Street, NW Washington, DC 20036

Karl Berolzheimer Sr. VP, General Counsel & Secretary Centel Corporation 8725 Higgins Road Chicago, IL 60631

James A. Dwyer, Jr. 2100 Electronics Lane Fort Myers, FL 33912

Jonathan D. Blake D. Scott Coward Covington & Burling P.O. Box 7566 1201 Penns. Ave., NW Washington, DC 20044 Albert Halprin Verner, Lipfert, Bernhard, McPherson and Hand 901 15th Street, NW Washington, DC 20005

Peter Tannewald Arent, Fox, Kitner, Plotkin & Kahn 1050 Connecticut Avenue, NW Washington, DC 20036

Wayne V. Black Michael R. Bennet Keller and Heckman 1150 17th Street, NW Suite 1000 Washington, DC 20036

Eric J Schimmel
VP
Telecommunications Industry Assoc.
Ad Hoc Microcell Committee
2001 Pennsylvania Avenue, NW
Suite 800
Washington, DC 20006

Quincy Rodgers Associate General Counsel General Instrument Corporation 1899 L Street, NW Suite 500 Washington, DC 20036

David L. Hill Audrey P. Rasmussen O'Connor & Hannan 1919 Pennsylvania Ave., NW Suite 800 Washington, DC 20006

Lisa M. Zaina General Counsel OPATSCO 21 Dupont Circle Suite 700 Washington, DC 20036 John E. Hoover Jones, Day, Reavis & Pogue 1450 G Street, NW Washington, DC 20005 Mark P. Royer Southwestern Bell One Bell Center Room 3504 St. Louis, MO 63101 Mark R. Hamilton McCaw Cellular Communications, Inc. 1250 Connecticut Ave., NW Suite 401 Washington, DC 20036

Donald F. Evans
Director, Technical Regulatory Affairs
MCI Communications Corp
1133 19th Street, NW
Washington, DC 20036

Barbara J. Stonebraker Cincinnati Bell 201 E. Fourth Street, 102-300 Cincinnati, OH 45201 Leonard S. Kolsky
VP and Director
Regulatory Affairs
Government Relations
Motorola Inc.
1350 | Street, NW
Suite 400
Washington, DC 20005

Paul R. Zielinski Rochester Telephone Corporation Rochester Tel Center 180 S. Clinton Ave. Rochester, NY 14646 Laura C. Mow Gardner, Carlton & Douglas 1301 K Street, NW Suite 900 East Tower Washington, DC 20005 Daniel J. Miglio Sr. VP Finance & Planning Southern New England Telecommunications Corp. 227 Church Street New Haven, CT 06510

JoAnne Bloom Ameritech 30 South Wacker Drive Suite 3900 Chicago, IL 60606 Gene H. Kuhn Director, Telecommunications Transmission Union Pacific Railroad Co. Missouri Pacific Railroad Co. 1416 Dodge Street Omaha, NE 68179 Paul Taft President Taft Broadcasting Company 4808 San Felipe Road Houston, TX 77056

G. Todd Hardy VP and General Counsel of PCN America, Inc. 153 East 53rd Street Suite 5500 New York, NY 10022 William D. Balthrope President Texas Wired Music, Inc. P.O. Box 8278 San Antonio, TX 78208 Charles T. Foree National Aeronautical and Space Administration Washington, DC 20546

David C. Jatlow Young & Jatlow 2300 N Street, NW Suite 600 Washington, DC 20037 William D. Balthrope President TX Wired Music, Inc. P.O. Box 8278 San Antonio, TX 78208 Harold C. Davenport General Counsel Public Service Commission of the District of Columbia 450 5th Street, NW Washington, DC 20001

Lawrence R. Krevor Jones, Day Reavis & Pogue 1450 G Street, NW Washington, DC 20005

John Lane Wilkes, Artis, Hedrick & Lane 1666 K Street, NW #1100 Washington, DC 20006 Raymond A. Kowalski Blooston, Mordkofsky, Jackson & Dickens 2120 L Street, NW Washington, DC 20037 GTE Service Corporation 1850 M Street, NW Suite 1200 Washington, DC 20036 Hollis G. Duensing General Solicitor Association of American Railroads 50 F Street, NW Washington, DC 20001 Marilyn Moore, Supervisor Office of Planning, Policy & Evaluation Michigan Public Service Comm. 6545 Mercantile Way P.O. Box 30221 Lansing, MI 48909

K.A. Wood, Secretary
The Association of the Electronics,
Telecommunications and Business
Equipment Industries
Leicester House
8 Leicester Street
London WC2H 7BN UK

Lynn Diebold
California Public Safety Radio Assoc.,
Inc.
California Highway Patrol
4016 Rosewood Avenue
Los Angeles, CA 90004

Jack T. Taylor Digital Spread Spectrum Technologies, Inc. 130 B. Kifer Sunnyvale, CA 94086

Thomas J. Casey Skadden, Arps, Slate, Meagher and Flom 1440 New York Avenue, NW Washington, DC 20005 Chandos A. Rypinski Local Area Communication Equipment, Inc. 921 Transport Way Petaluma, CA 94954 Mohamed Lyzzaik Electrical Engineer United Power, Inc. P.O. Box 929 Brighton, Co 80601

Steve Brohard GTE Telephone Operations 600 Hidden Ridge HQ02G26 P.O. Box 152092 Irving, TX 75038

Bob Butch Southern New England Telephone 227 Church Street 4th Floor New Haven, CT 06510 Patrick J. O'Shea NYNEX Corp. 120 Bloomingdale Road White Plains, NY 10605

Jim Butman Telephone & Data Systems 301 S. Westfield Road Madison, WI 53705

Julian Griffin Sprint/United 2330 Shawnee Mission Pkwy. Westwood, KS 66205 James R. Haynes Chief Engineer Uniden America Corporation 4700 Amon Carter Blvd. Fort Worth, TX 76155

Kyle Griffin Lincoln Telephone Co. 1440 M Street Lincoln, NE 68501

Michael P. Terry Interdepartmental Radio Advisory Committee US Department of the Interior 1849 C Street, NW Washington, DC 20240 Jerry Kephart BellSouth Telecommunications 675 W. Peachtree Street Room 38L64 Atlanta, GA 30375

Sophie Kogut US West Communications 1005 17th Street #1750 Denver, CO 80202 Roger Kohles Lincoln Telephone Co. 1440 M Street Lincoln, NE 68501 Mike Robinson Lufkin-Conroe Tel Exchange 321 N 1st Street Lufkin, TX 75902 Larry Sutliff Bellcore 290 W. Mt. Pleasant Ave. Room 2B230 Livingston, NJ 07039

Bill Todd Bell Atlantic 1320 North Court House Road Eighth Floor Arlington, VA 22201 Frank Panek Ameritech 2000 W. Ameritech Way Room 2F33C Hoffman Estates, IL 60196